

# ABUG Golden Jubilee

**50  
ABUG**



ASSOCIATION OF  
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**News  
Letters**



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# DIARY

The next few meetings will be held on:

2 September  
16 September  
7 October  
21 October

All meetings are held at the Sheffield Trades and Labour Club, Duke Street.

## COVER

This month's cover to celebrate our 50th edition, was designed by Ian Brown, and includes pictures of Acorn's 'four generations' of computer - the Atom, the Model B, the Master and the Archimedes.

## ARCHIMEDES AT THE SHOW

At last month's major Acorn User Show in London the main attraction was obviously and without a doubt, the Archimedes Computer. Many of the top names in the field of BBC and Master programming were at the show and all had their hands on the machine.

AMX are into the market even before the computer has been released to the public with a suite of graphics programs featuring advanced versions of PageMaker, AMX Art and many others. The supposed programmer had nothing much to offer at the show other than half a dozen menus that you could move around the screen independently. A small perk was that when a menu was selected its corners would twinkle as it was moved around the screen.

Computer Concepts have even had their logo digitised and they have it spinning around the screen on their opening title page for their suite of programs. Inter-word, Inter-base etc all available for the BBC Micro. The main differences seem to be that the Archimedes offers faster manipulation around a document or spread sheet and another added extra is that Computer Concepts have implemented an additional menu to make use of the 4096 colours providing the facility to change page, border, text and menu colours to suit one's liking. Whilst I was there I managed to set Inter-Word up with varying tones of cream and brown until the queue for the Archimedes became too large and was obstructing other display machines.

When I was departing from the Computer Concepts stand I saw the AMX programmer and the Computer Concepts representatives trying to copy a program from the 400 to the 300 series. One of the people remarked on the difficulty of partaking in such a task because of formatting problems. This does indeed sound like Acorn Compatibility!



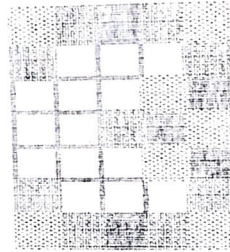
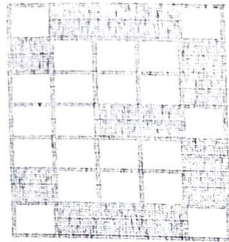
Superior Software are busy developing a game for the Archimedes, a playing demonstration of which is included in the impressive welcome package (all written in Basic, for Basic on the Archimedes is fast enough). The game, as pictured in many of the magazines, involves a ship similar to Elite's Cobras but shaded in, of course, showing highlights and dark areas crossing multi-coloured fields with the added interest of trees, houses and landing pads. The ship is controlled by a mouse and after a few attempts at the game you learn to adapt from using the keyboard. Your craft obeys all the laws of gravity and the design of the game has been very well thought out as when you fire into the water, you see the water splash. Acorn delighted in revealing that this game will be available as an Econet version involving the capacity for 80 stations to partake in the same game. Any description or even picture of the game would not do it justice. You will really need to witness it for yourselves. Just think of Elite with shaded-in craft taking full advantage of the 4096 colours available, but try not to think about how much it would cost!

Many firms that have been unknown in the field of the BBC and Master range have now appeared to step into the limelight. For example Millipede. They have developed digitising equipment for the BBC and Master with little success. Now they feature in Acorn's brochure and are helping Acorn to develop a sophisticated module for video digitising. This side of the Archimedes will obviously be developed as it can produce 3 frames per second of near colour television quality pictures. The graphical capabilities of the Archimedes are astounding and Acorn have taken full advantage by producing a more sophisticated version of AMX Art in its welcome package. Also in the welcome package is a music program taking full example of the sound, its quality on a par with the Music 5000 system. The music program is rather like the Island Logic Music System but is even more WIMPY. The Archimedes allows the operator to use headphones, speakers or even a hifi to play the music through.

Acorn were giving 'free' seminars on the Archimedes presented by none other than Steve White (who? - the guy who set up the club). He keeps promising to come back in order to demonstrate new Acorn products and although the Archimedes has been released I doubt he will return to ABUG to demonstrate even though it would be greatly appreciated.

## CHARACTERS

Acorn have had the intelligence to be able to assign a technique called anti-aliasing to all their characters. This means that the characters can be defined with four different shades combining black and white, two of which being those actual colours. On the now old fashioned BBC Micros and Masters characters are only definable in black and white. These two extra shades of grey help to create a sense of smoothness on letters with curves, for example S, O and 3. The new and old type of lettering can be seen more clearly on the next page.



### THE RANGE OF COMPUTERS

There are four types of Archimedes computers - two in the 300 series and two in the 400 series. An important fact is that the 300 series cannot be upgraded to the 400 series. This is a weak link between the series because many people at the show remarked that the 300 series ran out of memory very quickly because of the storage space required for the most advanced modes. The Archimedes 305 has 0.5Mbytes of Ram whilst the Archimedes 310 is double that. In the 400 range there are the 410, which has 1Mbyte of RAM and the 440 offering 4Mbytes and a hard disc as opposed to disk drives in the other three versions. All machines offer :-

- 1) 32-bit processing - as opposed to all other 16-bit Acorn computers
- 2) BBC BASIC V - running 30 times faster
- 3) IBM style keyboard - which is now a standard
- 4) BBC type O.S - ridiculously named Arthur
- 5) ECONET - which is implemented in all Acorn's computers

### BENCHMARKS

Copies of the standard bench mark tests have appeared in many of the magazines. Here is another copy but with my own implementation - TimeFast. This shows you how much faster the Archimedes is at doing the tests than the other machines in the table.

	Archimedes	Amiga 2000	Atari ST	IBM-PC
Realmath	0.37s	2.7s	3.5s	8.2s
Triglog	1.37s	6.7s	7.9s	47 s
Textscrn	3.53s	150.3s	44.8s	100 s
Grafscrn	6.9 s	25 s	92.7s	49 s
Timefast	-----	14.6s	10.34s	22.97s

### BENCHMARK TESTS FOR STORAGE

The storing times could not be recorded as the Archimedes tested did not have a hard disc system. An interesting piece of information is that the time to store a set amount of data to 3.5

inch disc from the Archimedes is more than twice as fast as the Amiga and IBM when storing to hard disc whereas it is only one and a half times faster than the Atari storing to hard disc.

### PODULES

Acorn's Podules were explained in the last issue. Here is a list of Acorn's forecasts on what they will provide.

- 1) Hard disc controller - for the 300 series only, as the 400 series has one built in already.
- 2) ROM Extension board - an extra space for the ever increasing amount of ROMs that find themselves piled up around the computer.
- 3) MIDI interface - for connecting musical instruments. Another point mentioned by Acorn at the show was the feasibility of sound sampling.
- 4) MS-DOS - Who wants to go back to the slow speed of the IBM compatibles? (Acorn must have flipped completely this time.) The Archimedes though, is said to be able to emulate the IBM format better than the compatibles.
- 5) Video Frame grabber - Watford Electronics and Millipede both had very impressive versions of this type of equipment that displayed pictures of you at near to real-time.

### CONCLUSION

The Archimedes partakes in the new series of RISC technology, which is a new, improved and cheaper method of computing. The Archimedes is almost certain to become greater than the Atari and Amstrad and these computers will shortly be fighting to prevent a dramatic fall in sales. Acorn have jumped into the correct market and as usual, they have named the right prices for the series of computers. The future for RISC technology is endless and it is not going to be long before the Archimedes becomes the game writer's dream, the musician's band and the draughtsman's drawing board. With the invention of podules Acorn have been able to open the market to such a wide variety of people which provide an easy way for the Archimedes to be tailor made to the customer's requirements. Many more companies will now follow the initiative and probably continue with the success that Acorn will now face. There is though, one snag. When will it be released? September or Acorn time? (Next July!)

Chris Bramwell



# WHAT'S IN THE MAGS?

DISK USER, Aug/Sept 1987, #2, 36pp plus 5.25 inch disc, £2.95

## On Paper:

Games reviews / RAM discs / Details of the disc programs

## On Disc:

Selective copier / Expert disc investigator / Ants! game /  
Mode 7 animations / File rescuer / Wordsquare puzzle  
generator / Software manager / Logo display / Recovering  
files from corrupted discs

A & B COMPUTING, September 1987, Vol 4, #9, 108pp, £1.50

## Features:

Choosing an Electron disc interface / Archimedes news /  
History of RISC / Archimedes benchmarks / Build your own  
Electron user port / Pascal / Laser printers

## Programs:

Interactive story

## Reviews:

Morley RAM disc / Arcade games (inc new Repton passwords) /  
Tandata's Tm 722modem / Aldoba's Squeak comms package / Nidd  
Valley's Chauffeur mouse utility / Fosse Systems' Arraymate/  
4Mation's Zoopak / Educational reading programs / Word-Ex  
Wordwise Plus utility rom / Interbase / View Professional /  
CDT educational software

THE MICRO USER, September 1987, Vol 5, #7, 148pp, £1.25

## Features:

Archimedes questions & answers / Multi User Games / Secrets  
of arcade games (7) / Micros in the Anatomy Department /  
Build a map measuring device (pedometer) / Ceefax guide

## Programs:

Soccer Manager game / ARM benchmark program / MPG calculator  
/ Adventure programming- compressing text / DFS file copying

## Reviews:

Arcade games / Advanced Control Panel rom / 'ARM Assembly  
Language Programming' book / Hybrid Music System / Dial up  
comms package / Adventures, inc Snowball map / 4mation's  
Zoopak

ACORN USER, September 1987, #62, 162pp, £1.30

## Features:

Computer games in education / Special effects in ViewSheet

## Programs:

Sideways ram loader / Changing the bleep / Proportional  
graphics dump / transferring information to assembler  
programs / ADFS file finder / Greek alphabet / More DFS  
files on a disc (SWR utility) / Graphics edge detection

## Reviews:

Archimedes / Arcade game, inc Lander for the Arc & Xor /  
Hard disc drives / Watford's Quest Paint / Mice / Video  
digitisers / Books